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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/028,814

12/20/2001

Nayon Tomsio

004-6459

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22120

7590

02/13/2003

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EXAMINER

MANDALA, VICTOR A

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,814

Applicant(s)

TOMSIO ET AL.

Examiner

Victor A Mandala Jr.

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-14 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-8 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "**said surface**". There is insufficient antecedent basis for this limitation in the claim.

Is the said surface the first surface or another surface?

Claim 15 recites the limitation "**said surface**" and "**said circuit driver**". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,150,615 Suzuki in view of U.S. Patent No. 4,300,115 Ansell et al.

2. Referring to claim 1, a circuit package, comprising: a dielectric substrate, (Ansell et al. Figure 2 #16a), having a first surface, (Ansell et al. Figure 2 Examiner's Label #1), and a second surface, (Ansell et al. Figure 2 Examiner's Label #2), disposed opposite to said first surface, (Ansell et al. Figure 2 Examiner's Label #1), and a via, (Ansell et al. Figure 2 #18a), extending there-between, with a first conductor, (Ansell et al. Figure 2 #20a), disposed on **said surface** and extending from said via, (Ansell et al. Figure 2 #18a), and a second conductor, (Ansell et al. Figure 2 #14a), disposed on said second surface, (Ansell et al. Figure 2 Examiner's Label #2), and extending from said via, (Ansell et al. Figure 2 #18a), with said via, (Ansell et al. Figure 2 #18a), placing said first, (Ansell et al. Figure 2 #20a), and second conductors, (Ansell et al. Figure 2 #14a), in electrical communication; and a driver circuit, (Suzuki Figure 15 #90), mounted to said substrate, (Ansell et al. Figure 2 #16a and Suzuki et al. Figure 15 #86), and including an input, (Suzuki Figure 17 #9), and an output, (Suzuki et al. Figure 17 #94), with said output, (Suzuki et al. Figure 17 #94), being in electrical communication with said first conductor, (Ansell et al. Figure 2 #20a), and having an output resistive component associated therewith, with said via having a resistive fill, (Ansell et al. Col. 2 Lines 49-50), disposed therein, defining a via resistance, (Suzuki Col. 9 Lines 49-51), connected between said first, (Ansell et al. Figure 2 #20a), and second conductors, (Ansell et al. Figure 2 #14a), said output, (Suzuki et al. Figure 17 #94), having an output impedance being defined by said output resistive component and said via resistance, (Ansell et al. Col. 2 Lines 49-50 and Suzuki Col. 9 Lines 49-51).

Suzuki et al teaches all of the claimed matter in claim 1 except for the vias being filled with a resistive fill, but Ansell et al. does. It would have been obvious to one skilled in the art to combine the teachings of Suzuki with the teachings of Ansell et al. because filling the vias with resistive material will utilize the vias, which will allow for reduced size in semiconductor manufacturing.

3. Referring to claim 2, a circuit package, wherein said via resistance has a value associated therewith to be a dominant component of said output impedance, (Suzuki et al. Col. 9 Lines 11-14).

4. Referring to claim 7, a circuit package, wherein said substrate in a printed circuit board, (Ansell et al. Col. 1 Lines 43-47).

Suzuki et al teaches all of the claimed matter in claim 7 except for the substrate being in a printed circuit board, but Ansell et al. does. It would have been obvious to one skilled in the art to combine the teachings of Suzuki with the teachings of Ansell et al. because filling the vias with resistive material will utilize the vias, which will allow for reduced size in semiconductor manufacturing.

5. Referring to claim 8, a circuit package, wherein said driving circuit is selected from a set of driving circuits consisting of, a buffer, an inverter and an amplifier, (Suzuki Col. 1 Lines 17 which includes transistor, which are amplifiers).

Allowable Subject Matter

6. Claims 3-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
7. Claims 9-14 are allowed.

Conclusion

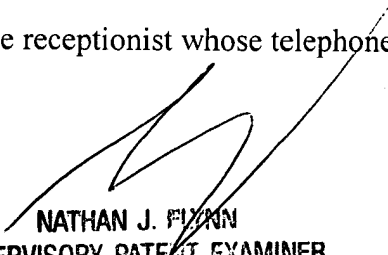
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor A Mandala Jr. whose telephone number is (703) 308-6560. The examiner can normally be reached on Monday through Thursday from 8am till 6pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

VAMJ

February 10, 2003


NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800